



SUBTERRANEAN CLOVER

A wonderful Pasture Plant for Poor, Dry,
Gravelly Land or Stony Rises.

Subterranean Clover is an excellent permanent pasture for all classes of soils and in many parts of this State has converted large areas of useless country into first-class grazing land for sheep, cattle and horses. It may justly be termed "**A First Class Business Proposition for the Grazier.**"



Plants of Subterranean Clover in mid-July. The Field from which these Plants were taken was quite bare in March.

Sown in mixtures, Subterranean Clover can establish itself more thoroughly the first season. The following can be confidently recommended:—

- No. 1020:**—20 lbs. Perennial Ryegrass, 4 lbs. Subterranean Clover, 2 lbs. Essex Rape.
No. 1021:—20 lbs. Italian Ryegrass, 4 lbs. Subterranean Clover, 40 lbs. Skinless Barley.
No. 1031:—10 lbs. Perennial Ryegrass, 10 lbs. Italian Ryegrass, 40 lbs. Algerian Oats, 2 lbs. Subterranean Clover, 2 lbs. Cowgrass.

Mixture **No. 1020** is suitable for Cold and Temperate Districts, **No. 1021** for Temperate and Warm Climates (especially under irrigation), while **No. 1031** is an excellent mixture for Cold and Temperate Districts, and will give an excellent hay crop the first two seasons. **No. 1031** will also give splendid results in Hot Districts where irrigation is available.

F. H. BRUNNING PTY. LTD.

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SUBTERRANEAN CLOVER

Subterranean Clover is an annual which, on account of its habit of re-seeding, is quite permanent when once established. The lower shoots force their seed pods into the soil in readiness for future propagation, from which characteristic the Clover probably derives its name. It comes away with the first Autumn rains, and in a week there is a dense growth where not a single plant was previously visible.

The plants grow very close together, the stems crossing and overlapping to a depth of several inches, the whole forming a dense mat. It dies down about the end of December, or early in January, leaving a mass of seed pods on the ground.

In the green state, Subterranean Clover is a succulent nitrogenous fodder, of which stock are extremely fond. Sheep and cattle keep it closely fed down, even when there is an abundance of natural pasture available. The lower stems, however, cling tenaciously to the ground, enabling the seed pods to penetrate the soil ready for the next season's crop, and thus preventing the plant from being eaten out.

On account of its remarkable seeding capacities and seed production, it spreads with great rapidity, and soon becomes firmly established. Once Subterranean Clover is started, the initial seeding will last a lifetime.

CLIMATIC CONDITIONS

While the ideal climate is one varying from temperate to medium cold, Subterranean Clover is particularly hardy and wonderfully adaptable regarding climatic conditions. It gives very satisfactory results when grown under irrigation in the Northern Areas of Victoria, although under such conditions, seeding in mixture with grasses and other Clovers is perhaps better than endeavouring to establish the plant by itself.

In Gippsland and the Western Districts of Victoria, in the Mt. Barker and South-Eastern Districts in S.A., in the South and South-Western Provinces of W.A. as well as in Tasmania and N.S.W., good returns may be looked for from this Clover which from recent experiences appears to be suited to any district where the minimum rainfall does not fall below 20 inches per annum.

SOIL PREPARATION

The greatest value of Subterranean Clover is that it grows in practically any class of soil, but is especially valuable for dry, stony rises, whereon other pasture plants cannot be established, and, in the Western District of Victoria, Subterranean Clover has converted acres of this class of previously sterile country into first-class sheep pasture land. Although especially valuable for poor ground, the plants respond to good conditions, and do exceptionally well on rich river flats.

Very little soil preparation is necessary, a rough harrowing being all that is required. Manure is not essential, although, on exceptionally poor ground, about 84 to 112 lbs. of superphosphate to the acre is beneficial in helping the plants to establish themselves more quickly. A dressing of lime, although not absolutely necessary, except in very acid soil, is particularly valuable, as with all members of the Trifolium family. A little initial outlay on lime and fertiliser, where necessary, is more than amply repaid by this plant.

FERTILISER

The fertiliser to which Subterranean Clover most readily responds is Superphosphate and the wonderful effect of this manure will more than repay the initial outlay involved in its use. Superphosphate may be sown with the seed, and used again for top-dressing in the Spring except in a very wet Winter, when a mixture of Bone Dust and Super will give more lasting results.

The quantity of fertiliser used varies from 84 lbs. to 112 lbs. per acre, according to the quality of the land being sown down.

SEED SOWING

The seed of Subterranean Clover may be sown any time from the first Autumn rains up till the middle of August. The earlier the season's conditions permit of the seed being sown the better, as the plants then have a longer period in which to make growth and establish themselves before forming the seed which is to be deposited in the ground to produce the following season's crop.

As the plant is botanically an annual, it will be understood that a good

deposit of strong vigorous seed is essential the first season if the pasture is to become permanent. Although it is perhaps necessary to emphasise this fact, there is seldom any difficulty in establishing the plant permanently, especially if the Clover is given a top-dressing of superphosphate about the middle of September the first year after sowing the seed.

When sown alone as small a quantity as 2 lbs. of seed will sow an acre, as the "first cost is the only one," a more liberal seeding in the first place will ensure a bigger yield while enabling the Clover to establish itself more thickly the second season. Once established thoroughly there is no necessity for re-sowing, and for this reason alone, the seed should not be stinted. 5 lbs., 6 lbs., or even 7 lbs. of seed is not too much for an acre where a quick stand is desired.

Where the seed is being sown alone, it is advisable to mix with sand or soil to ensure an even distribution, or if desired the seed can be mixed with superphosphate and the Clover and fertiliser sown at the one operation. When mixing seed with superphosphate, it must be sown immediately after mixing, and not allowed to stand mixed for more than say, three-quarters of an hour, after which time the manure is liable to burn the seed and impair its germination. Providing seeding is proceeded with at once, no danger may be apprehended from this source. These remarks apply equally to Lucerne, Grass Seeds and the other Clovers.

WHY YOU SHOULD PLANT SUBTERRANEAN CLOVER

1. ALTHOUGH AN ANNUAL, IT RESEEDS ITSELF EVERY YEAR, AND ONLY REQUIRES TO BE SOWN ONCE IN A LIFETIME.
2. ONCE ESTABLISHED, IS THOROUGHLY PERMANENT AND STARTS AGAIN EACH YEAR IN THE AUTUMN.
3. YIELDS A LARGE AMOUNT OF PALATABLE PASTURE GREATLY RELISHED BY SHEEP AND CATTLE.
4. SHEEP AND CATTLE WILL SUBSIST THROUGH THE SUMMER ON RESIDUE OF STEMS AND SEED PODS.
5. MAKES VALUABLE MEADOW OR CLOVER HAY FOR DAIRY COWS.
6. IT IS A NITROGENOUS AND SOIL-IMPROVING PLANT.
7. ONCE SOWN, NEEDS NO CULTIVATION WHATEVER.
8. IS MOST VALUABLE IN THE SUPPRESSION OF NOXIOUS WEEDS.
9. GROWS WELL ON DRY, GRAVELLY GROUND, AND ESPECIALLY ON STONY RISES WHERE OTHER PASTURE PLANTS WILL NOT THRIVE.
10. DOUBLES AND TREBLES THE CARRYING CAPACITY OF POOR AND MEDIUM QUALITY LAND.

IN MIXTURES

Splendid results are obtained by sowing Subterranean Clover in mixtures, thus enabling the plants to establish themselves thoroughly before being pastured too severely. Some good sample mixtures are quoted on the front page of this leaflet, and other tested mixtures are quoted in Brunning's Seed Mixtures leaflet No. 1924, which may be had post free on application.

Some practical experiences of sowing with Algerian Oats to establish the Clover alone the second season may also be of interest. In the Mt. Barker district, S.A., one grower got an excellent stand of the Clover in two years by mixing 5 lbs. of Subterranean Clover with $1\frac{1}{2}$ bushels of Algerian Oats per acre, sowing the mixture through the drill.

GENERAL TREATMENT

To get a field established quickly, it is necessary to sow thickly, and during the first season after sowing to shut the paddock up from September, so as to allow the plants to seed, instead of grazing them too heavily. When the Clover is sown in a mixture with oats or grass seed for hay, the latter must be allowed to get fairly ripe before cutting, so as to give the Clover a reasonable opportunity of seeding, and when cutting it is necessary to leave a longer stubble than usual. In subsequent seasons, these precautions are quite unnecessary.

No cultivation whatsoever is needed at any time. Subterranean Clover will do well under most unfavourable conditions and without fertiliser, but a top dressing of from 84 to 112 lbs. of super. per acre, either broadcasted or drilled in the Spring, makes a wonderful difference, and the extra returns will repay any time and labour spent in this direction. Subterranean Clover is a plant that responds wonderfully to any generous treatment.

UTILIZATION

Subterranean Clover is not only valuable as a pasture plant for sheep, cattle, horses or pigs, but possesses the extra advantage of helping to suppress weeds, and where the weeds are thickest, forces itself through and sends them to the "right-about" in "double quick time." Its thick growth and strong forcing habit smothers the weeds and chokes them out, and it is on record that in the Western District of Victoria it has already proved successful in overcoming and eradicating the poisonous Lobelia weed as well as that very prevalent pest, the Cape Weed.

It yields a meadow or clover hay of excellent quality, and cut when "just on the turn," makes the best of hay for dairy cows. As much as two tons of cured hay can be obtained per acre. The fattening qualities of the plant, especially when cut with the seed fairly ripe, are remarkable, and even in the Summer when the plants have died down and the fields are apparently bare, stock will still get a considerable amount of feed from the dried stems and pods which are left.

LEADING SUPPLIERS OF ALL FARM SEEDS

Perennial Rye grass.

Cocksfoot.

Chewings Fescue.

Crested Dogstail.

White Dutch Clover.

Cowgrass Clover.

Subterranean Clover.

Hubam Clover.

Trefoil or Hop Clover.

Dwarf Essex Rape.

Sudan Grass.

Paspalum Dilatatum.

Prairie Grass.

Creeping Bent.

Ky. Blue Grass.

Alsike Clover.

Strawberry Clover.

Sweet Clover.

Cluster Clover.

Berseem Clover.

Sorghums.

Japanese Millet.

Hunter River Lucerne Seed.

Samples and Quotations Free on Application.

BRUNNINGS

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